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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,426	10/21/2003	Benjamin P. Knapp		3830
7590	04/27/2005		EXAMINER	
Clifford Kraft 320 Robin Hill Dr. Naperville, IL 60540			NGUYEN, TAN QUANG	
			ART UNIT	PAPER NUMBER
			3661	
			DATE MAILED: 04/27/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/690,426	KNAPP ET AL.	
	Examiner TAN Q NGUYEN	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1)  Responsive to communication(s) filed on 21 October 2003.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4)  Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-24 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02/18/04..

- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

## DETAIL ACTION

### ***Notice to Applicant(s)***

1. This application has been examined. Claims 1-21 and 23-25 are pending.
2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).
3. Misnumbered claims 23-25 been renumbered as 22-24, respectively.
4. The prior art submitted on February 18, 2004 has been considered

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 7, 12-16 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Larson et al. (6,442,460).
7. As per claims 1 and 5, Larson et al. disclose a method and apparatus for networked wheel alignment communications and services which includes at least one local computer (see figure 1, item 12) in communication via a network with at least one

remote computer (fig. 1, item 10C for example), wherein the remote computer provides data acquisition, data storage, logging, software updates, and repair procedures to the local computer (see column 5, lines 45-49 and column 7, lines 14-19).

8. As per claims 2-4, Larson et al. also disclose that the system includes a database containing histories of maintenance system problem (see at least figure 2 and column 8, line 62 to column 9, line 18).

9. As per claim 7, Larson et al. further disclose that the system includes maintenance constraints that result in different fixes for different brands of equipment (see at least figure 3 and column 10, lines 11-28).

10. With respect to claims 12-16 and 18-20, the limitations of these claims have been noted in the rejections above. They are therefore considered rejected as set forth above.

#### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 6, 8, 9, 17, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. as applied to the claims above, and further in view of Kaman et al. (6,055,468).

14. With respect to claim 6, Larson et al. do not explicitly disclose that the vehicle maintenance system is an analyzer. However, Kaman et al. suggest a local computer, which is an engine analyzer which communicates with the remote computer as shown in at least figures 1 and 2. It would have been obvious to an ordinary skill in the art to realize that an engine analyzer can be used in place of the alignment system in the Larson as the vehicle maintenance system for which it can be communicate with the remote computer for conducting the maintenance service.

15. With respect to claims 8, 9, 17, 21 and 22 Larson et al. disclose the claimed invention as discussed above except for the system includes a video camera in communication with the local computer for conducting live two-way audio/video conference between the local computer and the remote computer. However, Kaman et al. suggest a vehicle analyzer system which includes a local engine analyzer (local computer), a remote controller, and video teleconference as shown in at least figure 1 and the related text. It would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the teaching of Kaman et al. into the system of

Larson et al. in order to provide the two-way audio/video conference between the local computer and remote computer.

16. Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. as applied to the claims above, and further in view of Smith et al. (5,835,871).

17. Larson et al. disclose the claimed invention as discussed above except for the decision algorithm is decision tree. However, such decision tree is well known in the vehicle diagnostic art as shown in at least figure 6 of the Smith et al. reference. It would have been obvious to incorporate the decision tree algorithm into the system of Larson for analyzing and making decision of the vehicle maintenance system.

18. Claims 11 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson et al. as applied to the claims above, and further in view of Smith et al. (5,835,871).

19. Larson et al. disclose the claimed invention as discussed above except for the decision algorithm is inference based. However, such inference based algorithm is well known in the vehicle diagnostic art as shown in at least the abstract, figure 7 and the related text of the Woodard et al. reference. It would have been obvious to incorporate the inference based algorithm into the system of Larson for analyzing and determining a correction for the problem of the vehicle maintenance system.

### ***Conclusion***

20. All claims are rejected.

21. The following references are cited as being of general interest: Sholl et al. (5,400,018), Colson et al. (6,181,994), Chou et al. (6,330,499), Larson et al.

(6,370,455), Katagishi et al. (6,735,504), Marko et al. (6,745,151), and Martin et al. (6,594,561).

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tan Q. Nguyen, whose telephone number is (571) 272-6966. The examiner can normally be reached on Monday-Thursday from 5:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached on (571) 272-6956.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to the Official Fax Center:

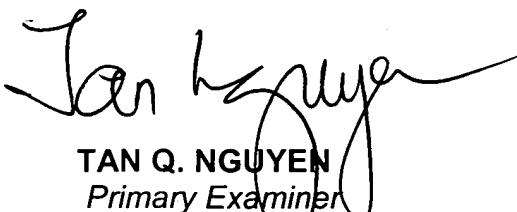
(703) 872-9306, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 501 Dulany Street, Alexandria, VA, Third Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-6584.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/tqn  
April 18, 2005

  
TAN Q. NGUYEN  
Primary Examiner  
Art Unit 3661